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Katharine Wilkinson ([00:02](#)):

This is A Matter of Degrees, stories for the climate curious. I'm Dr. Katharine Wilkinson.

Leah Stokes ([00:07](#)):

And I'm Dr. Leah Stokes.

Katharine Wilkinson ([00:12](#)):

Leah, can you believe it's already 2023?

Leah Stokes ([00:17](#)):

I really cannot. It is very hard to believe. It feels like just yesterday that it was March 2020.

Katharine Wilkinson ([00:25](#)):

Leah, I mean both yesterday and a lifetime ago. But however long a year or three years feels, what I like to do around the new year is take a little time to reflect, to set intentions for the year ahead, and also just soak up some wisdom. So a little trio of reflection, resolution, and inspiration.

Leah Stokes ([00:47](#)):

I love that. What a great idea. So I guess that means we got to start with the reflections. Okay. So earlier in this year, we set some goals for 2022 as part of our mini-series on "What can I do about climate change?" And as we reflect on the year, let's check in on those goals, Katharine.

Katharine Wilkinson ([01:05](#)):

Well this feels very like, "Have you turned on your homework?" But if I recall correctly Leah, you made a pledge to move your money by the end of the year to make sure that it wasn't funding fossil fuels while you sleep at night. So how's that going?

Leah Stokes ([01:20](#)):

Well with your help Katharine, I made a lot of progress. You gave a recommendation for Earth Equity Advisors, and so I decided to move my investment account to that holding, basically. So now it's invested in good, clean companies, and not giving money to the fossil fuel industry. And what about you, Katharine? I think you pledged to build up an electrification fund, right? Maybe to help you add to your electric stove. So how's that going?

Katharine Wilkinson ([01:48](#)):

Yep. I have been squirreling away some money each month, and I'm going to be making an electrification plan with my HVAC wizard Mitch. Shout out to Mitch. There are a few complicated pieces because I live in a condo, but I'm confident that we'll get there.

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(02:03):

And maybe the most exciting thing is by this time next year, my beloved, but aging Subaru will be replaced with an EV. So yeah, 2022 has been a lot of laying foundations. But I'm feeling really good about how it's all going.

Leah Stokes (02:19):

Wow. So you are on the road to electrification.

Katharine Wilkinson (02:22):

Oh yes sister, I am.

Leah Stokes (02:24):

I love it. So it wasn't just our little pledges that were successful this year in 2022. We also saw big pledges come to pass on the world stage, like President Biden. Remember that guy? When he was running for president, he committed to go big on climate.

Katharine Wilkinson (02:40):

Yes, of course. Then candidate Joe Biden committed to cutting us carbon pollution in half by the end of the decade. And that of course, is what scientists tell us is necessary if we want to have a chance to limit warming to 1.5 degrees Celsius.

Leah Stokes (02:56):

And as we covered in our episode back in July, that pledge that President Biden made, it was largely met with the passage of the Inflation Reduction Act, which is a law that will help the United States cut carbon pollution by around 40% by 2030. In other words, it's going to get us 80% of the way to meeting that goal.

Katharine Wilkinson (03:15):

And there were bright spots beyond the US too. We saw climate candidates win elections in Australia and in Brazil. We saw a historic deal for loss and damage funding come out of COP 27 in Egypt. Now, global action is still falling far short of where we need to be. But honestly Leah, 2022 made me feel just a little bit hopeful about climate progress.

Leah Stokes (03:39):

So that's a brief look back at the year, Katharine, which brings us to the next thing. Resolutions.

Katharine Wilkinson (03:45):

Yeah, I think we better look ahead.

Leah Stokes (03:47):

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Okay. So what do we want to do in 2023? I think we've got to set some climate intentions for the new year.

Katharine Wilkinson ([03:55](#)):

Well, one of the things that I'm really focused on for this year is taking the Climate Wayfinding program that we created and piloted in 2022 with The All We Can Save Project and making that experience available to a lot more people this year. So this is all about that classic nonprofit word scale, because I really believe that we have to be attending to the leadership infrastructure of climate work.

Leah Stokes ([04:23](#)):

You could also say it's democratization. You're bringing the Climate Wayfinding to the people.

Katharine Wilkinson ([04:28](#)):

Yeah, it's kind of like that.

Leah Stokes ([04:30](#)):

I love it. What a great idea.

Katharine Wilkinson ([04:32](#)):

And what about you, Leah Stokes?

Leah Stokes ([04:33](#)):

Well, what I'd really like to do in 2023 is work on a book. I want to write my second book about my experience working on what was originally called the American Jobs Plan, and then Build Back Better. And then finally, the Inflation Reduction Act. And what it felt like to work on a big campaign over many years to pass really historic climate legislation.

Katharine Wilkinson ([04:58](#)):

That is a book I am really excited to read. So get on it, sister.

Leah Stokes ([05:02](#)):

Yeah, all I have to do is write it.

Katharine Wilkinson ([05:05](#)):

Details, details.

Leah Stokes ([05:06](#)):

Details, details.

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Katharine Wilkinson ([05:08](#)):

And the intentions that we set now, they don't have to be huge. They don't have to be as big as a book or scaling a program. I actually love this thing that Dr. Katharine Hayhoe does every year. And as our listeners likely know, Dr. Hayhoe is a climate scientist, an amazing communicator. And she happens to spell Katharine just like I do. And each year, she tries to change one thing to make her daily life more climate-aligned.

Leah Stokes ([05:33](#)):

Yeah, I remember reading that one time she switched to more eco-friendly, climate friendly pet food I think.

Katharine Wilkinson ([05:40](#)):

I must tell you that at the end of the year, I switched my dog over to some newfangled cricket dog food. It's called Chippin, which I think is an incredibly cute name. And we'll have to see how Mr. Arthur Dog does on that. And I know Leah, you have been working on some smaller things in your day-to-day life. So tell us what you've been up to.

Leah Stokes ([06:04](#)):

Well, in part inspired by the petrochemicals episode that we recently aired about the effects of plastic on people, particularly communities of color, I've really been trying to use less plastic. I mean, it goes back further. Probably goes back a decade, but I've been way more focused on it lately.

Katharine Wilkinson ([06:22](#)):

I think that's awesome, Leah. Because as we heard in that petrochemical episode, plastics are a toxic lifeline for the fossil fuel industry. And while it's going to take systemic policy changes to really get at the root of that, in the near term, we can get more aligned in our own lives with the world beyond plastic. And I like to think about each of those steps as almost little data points of proof that it is possible.

Leah Stokes ([06:49](#)):

Exactly. Let's build those new products that are plasti-free. So, all right. Excited to hear some of my day-to-day things that are plastic free?

Katharine Wilkinson ([06:56](#)):

Talk to me.

Leah Stokes ([06:57](#)):

All right. We're starting first with toothpaste. So I started using these tablets called Huppy, H-U-P-P-Y. Like happy I guess, but with a U. And basically, rather than squeezing it from a

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plastic tube, you stick a little tablet in your mouth and you chomp on it, kind of like you're chewing a candy. Actually my mom, she tried one the other day, and she said she just swallowed it.

Katharine Wilkinson ([07:24](#)):

Be warned future users.

Leah Stokes ([07:27](#)):

One of them is watermelon flavored. It's kind of like bubble gum. So, highly recommend Huppy. All right, we're probably all still going to the bathroom. We haven't transcended that. So what about toilet paper? Okay? So I've started using this product called Who Gives A Crap.

Katharine Wilkinson ([07:43](#)):

I really love them.

Leah Stokes ([07:44](#)):

Do you use it too?

Katharine Wilkinson ([07:45](#)):

Yeah. Yeah, yeah, yeah.

Leah Stokes ([07:46](#)):

So each roll is wrapped in paper, and they're actually kind of pretty, and they say funny things. And I think once a year they do these weird ones that are designed with a Where's Waldo theme where you try to find characters. I have not gotten those, but they're pretty exciting.

Katharine Wilkinson ([08:01](#)):

Also, you get a big box at your door that says Who Gives A Crap? And that in and of itself can make your day.

Leah Stokes ([08:07](#)):

Yeah, exactly. And then the last rolls are red, so when you're running out of toilet paper. It's a very smart system.

([08:13](#)):

All right. And then also shampoo. I think we're still washing our hair around here. I don't know Katharine, do we still do that or are we such deep environmentalists that we've-

Katharine Wilkinson ([08:21](#)):

No, I'm still currently a hair washer.

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Leah Stokes ([08:23](#)):

Me too, me too. Okay. So I started using something in aluminum bottles called Alpine Provisions. And the cool thing is it's also biodegradable because this year, I changed my water system to be gray water, so it's going to empty into my garden and feed my 30 something fruit trees. So I'm very excited about that.

Katharine Wilkinson ([08:45](#)):

That's very cool.

Leah Stokes ([08:46](#)):

Okay. And last but certainly not least, something I use every day since I have small children. Earplugs. Very important. If I do not have a pair of my earplugs, bad things happen.

([08:56](#)):

So I've started using something called Happy Ears, which they're actually still plastic, but the cool thing is they're recycled plastic. And they even make a product out of ocean plastic, crazy. And they're reusable. So basically you buy them once and assuming you don't lose the pair, which generally I don't for six months at a time, you can keep using them. I'm loving my Happy Ears.

Katharine Wilkinson ([09:20](#)):

These are all really nice suggestions, and maybe we should just give a quick disclaimer, Leah.

Leah Stokes ([09:24](#)):

Yeah, these products are not sponsored folks. We do not make money by me telling you the weird things I put in my ears, or my hair, or use on the toilet. This is just stuff I-

Katharine Wilkinson ([09:33](#)):

Probably no one would pay for that to be honest.

Leah Stokes ([09:35](#)):

Hey now, I'm a hashtag influencer. I'm kidding. But these are just things I found, I'm excited about. I just want to share with people. We make no money in telling you about these weird plastic-free things I've started using in my daily life.

Katharine Wilkinson ([09:54](#)):

And now we want to hear some answers from all of you, our listeners. What are your reflections on 2022 and your climate resolutions for 2023? We've got a link in the show notes that you can click on, or find it on our website degreespod.com. We'd love to hear from you.

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Leah Stokes ([10:09](#)):

And one thing we'd really love to hear is if our podcast A Matter of Degrees has inspired you in any way to sort of change something in your daily life or maybe make a big change, start a campaign. We'd love to hear about that.

Katharine Wilkinson ([10:23](#)):

Yeah, big or small. We would love to know if the show has changed how you understand the climate crisis or moved you to action in any way.

Leah Stokes ([10:30](#)):

In fact, a few of our listeners have already reached out to us. I know, strange. And just the other day, somebody shared that in one of our episodes in season two, you know the one on prestige and fossil fuel jobs, that it profoundly changed their life.

Katharine Wilkinson ([10:43](#)):

So after listening to the episode, Steven Horn told us he was moved to reach out to Duncan Meisel, who's the director of Clean Creatives. And that's a movement of PR professionals and advertisers who are cutting ties with fossil fuels. Steven's based in South Africa. And he thought, "Well, why not launch Clean Creatives here?"

Leah Stokes ([11:00](#)):

And so he did. So now there's Clean Creatives South Africa. And it's already attracted over 20 South African agencies and more than 30 creatives to sign the pledge.

Katharine Wilkinson ([11:10](#)):

It's really exciting. And I think it's a testament to the way that storytelling can actually be a spark for really important action.

Leah Stokes ([11:16](#)):

So we'd love to hear from you. Tell us your story. Click on the link in the show notes or find it on our website, and tell us what are you thinking, what are you up to? We'd love to hear from you.

Katharine Wilkinson ([11:25](#)):

And as I said Leah, for me, the new year is also about inspiration. So I'm really intentional as the year closes and another one begins with what I'm reading, whose ideas and wisdom I'm taking in. I'm curious, what are some of the things that are inspiring you right now, Leah?

Leah Stokes ([11:42](#)):

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Well when it comes to inspiration, I recently read a book called *Ducks: Two Years in the Oil Sands*. It's a graphic novel by Kate Beaton. It was actually put on a lot of the best books of the year lists. And it's about the human costs of fossil fuel extraction, even in a rich country like Canada.

(12:01):

I binge read it in like 24 hours. It was really devastating, and powerful, and insightful. I cannot recommend it highly enough. It really left me inspired, wondering if I could write a book that powerful on climate change.

Katharine Wilkinson (12:15):

Well, I believe that you can. And I have to say, speaking of books, we have a very special gift for our listeners, wrapped up in a little bow in this episode. So back in 2018, actually on New Year's Eve, I curled up with Sherri Mitchell's incredible book, *Sacred Instructions*, and I have to say it imprinted on me in pretty profound ways. And so, to bring us into 2023 with inspiration and wisdom, we wanted to share with all of you not that book, but Sherri's essay from the *All We Can Save* anthology.

Leah Stokes (12:51):

This is such a great idea. This essay is called "Indigenous Prophecy and Mother Earth," and the essay is read aloud by none other than Emmy award-winning actress Alfre Woodard. We think it's the perfect way to start the new year. You know, because it's another year for vital work for a just, life-giving future. And because these changes that we make in our daily lives, they don't have to be material, right? Change can also mean a shift in our perspective.

Katharine Wilkinson (13:18):

And I have to say each time I return to this essay, I find some fresh insight. Sherri speaks to the broader changes that we need to make in our patterns of thought, our scientific methods, our collective values, our ways of life, and that so much of that is about returning to indigenous ways of knowing and being. It's a grounding reminder to focus on reciprocal relationships with each other, with all beings, with the whole of our living earth.

Leah Stokes (13:45):

So without further ado, here's the essay.

Alfre Woodard (13:51):

Indigenous Prophecy and Mother Earth. Sherri Mitchell Weh'na Ha'mu Kwasset Penobscot Nation. Read by Alfre Woodard.

(14:01):

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"I used to keep a cartoon image on the wall in my office. The image was of two scientists with clipboards standing over a maze. Inside the maze was a mouse who had successfully reached the end and found the cheese. The caption read, 'He found the cheese again. He loves it in there.'"

(14:23):

"I kept that cartoon to remind me that this same type of biased science was used throughout history to paint a distorted view of indigenous peoples and our ways of being and knowing. Racially biased science has been used to dehumanize and diminish indigenous peoples in the eyes of the larger society from the early days of scientific exploration. The research is always influenced by the biases and beliefs of the researcher. This is especially true when there are significant cultural differences between the observer and those being observed."

(15:02):

"Assuming scientific neutrality when it comes to the study of cultures that are vastly different from one's own is naive at best. And when those studies are initiated for the purpose of proclaiming one culture superior to another, the hope of neutrality becomes even more distant."

(15:23):

"Lamentably, history has shown that it is not bias alone that influenced scientific research on culture and race, but something more directed and nefarious. On December 27th, 1899, British major Ronald Ross informed members of the Liverpool Chamber of Commerce that the great powers tired of self-development were endeavoring to extend their possessions and civilization all over the world, and that he believed imperial success would largely depend upon scientific success."

(16:00):

"100 years later, we learned that Major Ross's declaration was a signal for what would come. In her stunning book *Decolonizing Methodologies*, Indigenous scholar Linda Tuhiwai Smith writes, 'The ways in which scientific research is implicated in the worst excesses of colonialism remains a powerful remembered history. This collective memory of imperialism has been perpetuated through the ways in which knowledge about indigenous peoples was collected, classified, and then represented.'"

(16:36):

"Racist ideologies are not only responsible for the aberrant social thinking that led to the exploitation of indigenous peoples, they are also responsible for the creation of a racially exclusive framework that has bolstered colonial scholarship and relegated indigenous knowledge to obscurity. The purposeful degrading of indigenous knowledge by mainstream governments, academics, and scientists, has led to distorted ideas about our intellect, and created countless stereotypical myths about our ways of knowing and being."

(17:15):

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"Because indigenous peoples didn't share European ideas about land ownership, we were considered primitive. Because we had no desire to place the sources of our survival, natural resources, into the stream of commerce, we were viewed as ignorant. And because our value system was based on relationships and not currency, we were believed to lack the capacity to live civilized lives."

(17:47):

"Ironically, the indigenous ways of knowing and being that European colonists saw as primitive and uncivilized are now being actively sought out to save our environment and humankind from the brink of extinction."

(18:04):

"Indigenous knowledge is based on millennia long study of the complex relationships that exist among all systems within creation. It encompasses a broad array of scientific disciplines. Ethnobotany, climatology, ecology, biology, archeology, psychology, sociology, ethno-mathematics, and religion. The keepers of indigenous knowledge carry thousands of years of data on things such as medicinal plant properties, biodiversity, migration patterns, climate changes, astronomical events, and quantum physics. They carry the stories of countless epics of human history, going all the way back to the beginning of human life on mother Earth. And they provide insights that help fill the gap between our physical and subjective experiences, enabling us to understand how our internal consciousness impacts the ways that we view and experience the world around us."

(19:12):

"In recent years, many scientists have realized that they are just now discovering what indigenous peoples have long known. For instance, archeologists and environmental scientists have found indigenous marine management sites that predate European settlement. They had believed marine management who have come only after European influence, despite information to the contrary that was provided by indigenous peoples. Scientists are now gaining valuable information regarding changes in the local ecosystem from the indigenous peoples in some coastal areas, who are helping them to develop updated management plans. In addition, indigenous oral traditions have corrected inaccurate or misleading accounts of major events in US history, providing complete inaccurate depictions of interactions between the US Cavalry and various indigenous nations. Including detailed drawings of battle sites that chronicle everything from wound locations, to the colors of the uniforms."

(20:20):

"The challenge for science has always been to see beyond the confines of its inherent bias, and to overcome hierarchical, reductionist, and compartmentalized thinking, to see the holistic patterns that are present throughout creation. Seeing the world through an indigenous lens requires one to take a world centered view that recognizes the relationships

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that exist among all living systems, and the many ways that these systems are constantly moving toward harmony and balance."

[\(20:58\)](#):

"Unfortunately, a great deal of critical indigenous knowledge has remained outside the carefully ordered categorization of Western thought, making its holistic concepts difficult to comprehend for those who have been trained to see the world in fractured pieces. It is this fractured view that has been central to the fracturing of our societies and environment.

[\(21:27\)](#):

Indigenous kinship systems, with their inclusion of beings from the natural world, have been viewed as little more than magical thinking by mainstream science. A. S. Thompson, a doctor in the British army who authored volumes of scientific publications, wrote the following about indigenous peoples. 'The faculty of imagination is not strongly developed among them, although they permitted it to run wild in believing absurd superstitions.' He was not alone in his beliefs.

[\(22:01\)](#):

The extended kinship networks of indigenous peoples were viewed as a superstitious absurdity by colonial scientists for centuries, who were often cited as justification for the paternalistic practices of colonial governments. However, in 2015, a significant shift occurred. In September of that year, scientists from 11 institutions published the first draft of their Open Tree of Life project in proceedings of the National Academy of Sciences. This phylogenetic map funded by the National Science Foundation shows the living connection among 2.3 million species. This was the first time that science acknowledged that our kinship teachings were more than fanciful fiction.

[\(22:54\)](#):

"Today, interest in indigenous knowledge is growing within the scientific community, now that there is increasing awareness that it accurately describes a number of unfolding scientific theories. Indigenous knowledge recognizes the individuality of elements in the natural world, and how they relate to a larger whole, using traditional family kinship models as their scaffold. It does this without stripping away the individual value or attempting to force what is being seen into a larger body of generalized laws or theories. It simply recognizes the familial relationship, and acknowledges that all life is both sovereign and interdependent. And that each element within creation, including humans, has the right and the responsibility to respectfully coexist as co-equals within the larger system of life.

[\(23:56\)](#):

If we hope to truly align indigenous knowledge with Western thought in order to address the crises of our time, mainstream thinkers will have to be courageous enough to challenge the barriers that have prevented indigenous knowledge from coming forward previously, and begin to expand their sight to a more holistic vision. And since all scientific discovery stands on the shoulders of those who have come before, the field of science itself will have to

reconcile its shameful past, and revisit the reprehensible displays of racially driven confirmation bias that form its foundations.

[\(24:39\)](#):

Today, we face multiple systems on the verge of collapse, including vital ecosystems that are necessary to sustain life. Experts from the United Nations, the scientific community, governmental agencies, and environmental organizations, have all pointed to indigenous peoples as being key to addressing climate change. Those who once claimed that indigenous issues were fringe or ephemeral are now recognizing that protecting indigenous rights is an ecological necessity.

[\(25:17\)](#):

Though indigenous peoples comprise only about 5% of the global population, our lands hold approximately 80% of the world's biodiversity, and an estimated 40 to 50% of the remaining protected places in the world.

[\(25:35\)](#):

We also create the least greenhouse gasses, and have the largest carbon stores on the planet within our territories. This makes the protection of indigenous rights, along with our lands and ways of life critical to the wellbeing of the planet. And it makes us natural partners in the race to address climate change. But we must be discerning in those partnerships.

[\(26:01\)](#):

There are many who appear to be seeking indigenous partnerships, merely to overcome the obstacles that indigenous rights present to ongoing development. We must also recognize that climate change is only one symptom of a larger problem.

[\(26:20\)](#):

Human beings have fallen out of alignment with life. Their beliefs and ways of being have shifted dramatically from those of their ancestors, taking them further and further away from the sources of their survival. As a result, people have forgotten how to live in relationship with the rest of creation. They have lost the respect for their elders in the natural world, such as the trees, waters, soils, and millions of other species that thrived on mother earth long before human beings arrived.

[\(26:56\)](#):

"Therefore, the greatest contribution that indigenous peoples may be able to make it this time is to continue providing the world with living models of sustainability that are rooted in ancient wisdom, and that inform us how to live in balance with all our relations on Mother Earth. This will require non-indigenous people to stand with us and ensure that our lands, waters, and ways of life are not further eroded by government and industrial intrusion." Here in the northeastern woodlands, the traditional Wabanaki people adhere to a set of core cultural values that are contained in our sacred way of life, what we call skejinawe bemousawakon.

[\(27:47\)](#):

These foundational teachings provide us with a solid framework upon which we can build our lives. Central among these teachings is an understanding of the deep interrelatedness of the sacred and the secular. Our traditional societies are rooted in one inseparable reality, that acknowledges the inviability of all aspects of creation.

[\(28:13\)](#):

There is no separation between ceremony and our daily walk in the world. Everything is interrelated, and recognized for its sacred place within the web of life. We acknowledge that the great pull of the universe is a desire to live in harmony with the creator, which is expressed most effectively in our own lives by living harmoniously with the rest of creation. We also recognize that time as it has been described, is an illusion. For us, time does not exist as separate epics, unfolding in linear fashion. But as one movement unfolding in all directions simultaneously. We realize that we cannot separate ourselves from those who have come before us or those who will follow, because we all exist together in this one moment.

[\(29:14\)](#):

The harm experienced by our ancestors is felt in our bodies today. And the harm we create today will be experienced by our future generations tomorrow. We are all inextricably linked through these shared experiences that cross time. Our sense of responsibility for the coming generations is reflected in this awareness.

[\(29:43\)](#):

It is this way of life that has allowed us to exist in a balanced relationship with our local ecosystems for more than 10,000 years. And it is this sacred way of life that can bring humanity back into alignment with a future that not only ensures human survival on earth, but also nurtures amended relationship between human beings and all other life. The first step on this path is for us to shift the central point of our awareness.

[\(30:22\)](#):

The anthropocentric beliefs and philosophies that have ruled mainstream ideologies for generations are incapable of accommodating the holistic view needed to escape our current predicament. In my book Sacred Instructions: Indigenous Wisdom for Living Spirit-Based Change, I write, the entire span of human life exists within each one of us going all the way back to the hands of the creator in our bodies. We carry the blood of our ancestors and the seeds of the future generations. We are the living conduit to all life.

[\(31:05\)](#):

This does not mean only human life, but all life that has ever existed upon Mother Earth. All our creation stories teach us that we are born of the same foundational elements that make up all life in the known universe. In one story, we enter this world when [inaudible 00:31:24] cap shoots an arrow into the ash tree and creates an opening for us to emerge. The ash tree offers humankind the energy of life from within its roots to provide us passage into this world.

[\(31:39\)](#):

In another story, the first human is formed from the soil of Mother Earth. In that story, the eyes are the first part of the body to be created. Once the eyes are created, the first human remains in the soil for an entire cycle of life, watching how the rest of creation moves before their arms and legs are given to them.

[\(32:04\)](#):

In the story of Sky Woman, the mother of all life looks down and sees that the earth is made entirely of water, with no land for her children to live upon. So she descends from the stars to form a land mass on the back of a turtle, creating what is now known as Turtle Island.

[\(32:28\)](#):

In the story, Sky Woman enlists the help of the animals to gather soil from the bottom of the great water, so that she may build the land that will sustain her children once they are born. One animal after another volunteers to dive into the water and retrieve the soil. And one by one, they all return to the surface with the same story. The waters are too deep. They could not reach the bottom.

[\(32:57\)](#):

Eventually, the humble [inaudible 00:33:01] muskrat comes forward and offers to try to gather the soil. He enters the water, and is gone for a very long time. And the other animals become greatly concerned for his safety. Eventually, his tiny lifeless body floats back to the surface, and the other animals bring him onto the turtle's back.

[\(33:26\)](#):

As the animals are grieving the loss of their friend, one of them notices that his fist is clenched around something. When Sky Woman opens his hand, she finds the soil that she needs to form land. She is so moved by his sacrifice, that she breathes life back into him, so that he can live once again.

[\(33:51\)](#):

From that point forward, [inaudible 00:33:54] has made his home in the place where the land and water meet. Sky Woman created Turtle Island, and gave birth to the indigenous peoples of North America.

[\(34:06\)](#):

In these stories, the elements of the natural world play a central role in the creation of human life. These stories teach us that our life upon Mother Earth has been supported by the beings of the natural world. They also remind us that these beings preceded us into this world, making them our elders. Through these stories, these beings became our grandmothers, grandfathers, aunts and uncles. In [inaudible 00:34:35], they became our relatives.

[\(34:39\)](#):

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Science has finally confirmed that human beings share genes with all living organisms. Long before this truth was discovered by modern science, we had these stories, and a sense of kinship, and responsibility toward our relatives in the natural world.

(35:00):

This one teaching has been central to the sustainable way of life that has kept indigenous people's in balanced harmony with our local ecosystem for tens of thousands of years.

(35:14):

Kinship defines how we relate to one another. It determines whom and what we include in the structuring of our societies, and whom and what we feel a responsibility toward. If we look at our societies today, it is quite clear who and what has been excluded, and the incredible cost that this exclusion has had on our societies and our world.

(35:43):

One of the more damaging effects of colonization and forced assimilation has been the homogenization of our society. Under colonial regimes, the voices of those on the fringes of society or living completely outside of the colonial system have been silenced or ignored. Within these regimes, there's also been a centralization of power and authority within a very limited demographic of society, wealthy white men, which has further limited the universe of knowledge and access to new ideas and perspectives. The stifling of creative thinking and suppression of critical analysis that results from such narrow representation erodes the overall intelligence of the entire society.

(36:35):

These restrictive systems provide no opportunity for alternative ways of being to be presented. And since cultural ways of being are passed on from one generation to the next, there has been very little variation in the destructive patterns that brought us to this place of collective crises. The overall lack of diversity within the patriarchal colonial paradigm has had a suffocating impact on creative intelligence, and a divisive impact on society.

(37:08):

Diversity fosters social coherence, creating more stable and harmonious relational networks, which in turn lead to more stable and harmonious societies. Additionally, the more diverse a group or community, the greater the perspectives and innovations that arise. And the greater the success rate for all. Human diversity is just as critical to society as biodiversity is to an ecosystem. Without it, there can be no healthy functioning.

(37:41):

The loss of diversity within mainstream systems and structures has left a fracture in our societies that must now be healed through the purposeful and systematic inclusion of diverse voices, including the voices of the natural world, within the social dialogue.

(37:59):

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"Every natural soundscape generates its own unique signature. One that contains incredible amounts of information," explains Bernie Krause. "And when we listen closely, it gives us incredibly valuable tools by which to evaluate the health of a habitat across the entire spectrum of life."

[\(38:22\)](#):

The voices of the natural world can inform us when an ecosystem has been unsettled by human activity. This is something that indigenous peoples have always known, because we have been listening to the voices of the natural world in our territories for thousands of years. When we recognize the personhood of the beings in the natural world, we start to recognize that they have something valuable to teach us.

[\(38:49\)](#):

The rocks, the eldest among us, carry 4 billion years of stories. This is why we refer to them as grandfathers, because they carry an enormous amount of diverse information and perspectives. Every plant, tree, and animal carries its own unique wisdom, and can teach us how to live harmoniously with one another, and in relationship with Mother Earth. When we extend our view of kinship beyond our anthropocentric view, a whole new world of knowledge becomes available to us.

[\(39:27\)](#):

Another benefit of kin-centric awareness is that it informs us of our responsibilities and obligations. When we have a bond of kinship with another, it impacts the way that we care for them. In healthy systems, we treat our kin with a greater degree of care, often expressing more gentleness and protectiveness toward them. It is the same when we love.

[\(39:54\)](#):

When we love, we treat the beloved with reverence and respect. Indigenous peoples living in accordance with these beliefs have lived in loving relationship with the beings in the natural world for millennia. Indigenous kinship systems provide models of reciprocal care.

[\(40:16\)](#):

We care for Mother Earth, and Mother Earth cares for us. We have words in our language that help to remind us of the balance that this relationship requires. One of these words is [inaudible 00:40:32]. It means he or she has enough. It is an acknowledgement that an individual has what they need to live their life with a sense of safety and dignity. Another word [inaudible 00:40:47] means everyone has enough. The everyone envisioned in that phrase includes all the beings in the natural world. When we are contemplating the value of enough, we recognize that [inaudible 00:41:03] must always be weighed against [inaudible 00:41:06] to ensure that there is a balance to life.

[\(41:11\)](#):

In order to survive, we must all come to realize that we do not exist solely for the benefit or the development of our individual lives as human beings. Rather, our role as human beings is to

evolve into a state of inner being with the rest of life, so that we may join the universal flow that is ever moving toward harmony and balance. This is the only way that life on Mother Earth will remain viable into the future.

[\(41:46\)](#):

Indigenous peoples from across Turtle Island have several prophecies that correspond to the times we are living in. These prophecies tell of the dangers inherent in abusing Mother Earth. Rather than seeing these prophecies as importance of a determined future, we see them as sacred instructions that edify our walk upon Mother Earth. They provide echoes our ancestors love by offering us the guidance needed to overcome the challenges of this time, and survive into the future.

[\(42:22\)](#):

It is these ancient prophecies that have prepared us for this time, and inform us of the dire consequences of ignoring the truths unfolding around us. It is because of this ancient knowledge that indigenous peoples have literally been laying down their lives to stop the flow of harm that is being caused by the industrial destruction of Mother Earth. Because we know that this path will inevitably alter our way of life. And if left unchecked, it'll eliminate the ability of life to exist on Mother Earth.

[\(43:04\)](#):

Today, prophecies are unfolding all around us. We are all observers and participants. Our ancestors spoke of a time seven generations after first contact was made with the white man, when Mother Earth would become sick as a result of human activity. They told us that the trees would begin dying from top down, the waters would run black with pollution, and the soil would stop providing us with food, as the insects began disappearing from the earth.

[\(43:39\)](#):

In 1970, a Hopi elder from the village of Hotevilla came forward and shared these words about the future we were facing. "Nature will speak to us with its mighty breath of wind. There will be earthquakes and floods causing great disasters, changes in the seasons, and in the weather, disappearance of wildlife, and famine in different forms. There will be gradual corruption and confusion among the leaders, and the people all over the world. And wars will come about like powerful wins."

[\(44:18\)](#):

All these things have been foretold, and they have all come to pass. Fortunately, the stories told about this time have not all been so dire. There are also many that tell of a time of unification and healing.

[\(44:35\)](#):

In 1877, Crazy Horse delivered a powerful prophecy following a ceremony with Sitting Bull. This ceremony took place a stone's throw from where the water protectors gathered at Standing

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Rock in 2016 to stop the Dakota Access Pipeline, when the Lakota people took a vital stand for the preservation of life by protecting our sacred waters.

[\(45:00\)](#):

During that 2016 event, people from all corners of the earth came to stand with the Lakota, to seek their knowledge and understanding of unity among all living things. As a result of that stand, young people around the world now carry the seed of understanding that was given to them by the Lakota people.

[\(45:24\)](#):

This is something that Crazy Horse spoke of nearly 140 years earlier. Here are his words. "Upon suffering, beyond suffering, the Red Nation shall rise again. And it shall be a blessing for a sick world. A world filled with broken promises, selfishness, and separations. A world longing for light again. I see a time of seven generations, when all the colors of mankind will gather under the sacred tree of life, and the whole earth will become one circle again. In that day, there will be those among the Lakota who will carry knowledge and understanding of unity among all living things. And the young white ones will come to those of my people and ask for this wisdom. I salute the light within your eyes where the whole universe dwells. For when you are at the center within you and I am at that place within me, we shall be as one."

[\(46:35\)](#):

Today, people from all corners of the world are beginning to come together to address the sickness that has overtaken the world. And they are looking to indigenous peoples to guide them in this process. The Anishinaabe prophecy of the Seven Fires provides clear guidance for non-indigenous peoples during this crucial time. The prophecy highlights seven periods of time linked to the indigenous people's contact with the light-skinned people from across the water. It offers advice and warnings for each of these periods.

[\(47:16\)](#):

Ojibwe Anishinaabe elder and wisdom keeper Jim Dumont tells us that we are in the time of the seventh fire. This is what the prophecy has to say about this time. "If the new people learned to trust the ways of the circle and train themselves to hear their inner voice, wisdom would return to them in waking and sleeping dreams. And the sacred fire would be lit once again. Then the light-skinned people would be given a choice of two paths. If they chose the correct path, then the seventh fire would be used to light an eighth fire, which would be a lasting fire of unity and peace. If they chose the wrong path and stayed locked into their old mindset, the destruction they wrought will come back and destroy them. And all the people of the earth will experience great suffering and death. We have reached the point of choice where the light-skinned people must decide which path they will choose. Take the path of unity and peace, or stay on the current path and destroy themselves and countless others with them."

[\(48:37\)](#):

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Whenever I hear this portion of the Seven Fires prophecy, it reminds me of a quote by Felix Cohen, which also seems a bit prophetic. "Like the miner's canary, the Indian marks the shift from fresh air to poison gas in our political atmosphere. In our treatment of Indians, even more than our treatment of other minorities, reflects the rise and fall in our democratic faith."

(49:10):

Cohen's warning to his contemporaries that indigenous peoples were the miner's canary within the political atmosphere can easily be extended to our current environmental catastrophes. Indigenous peoples have been sounding the alarm for centuries. In the early 20th century, Oglala Lakota chief John Hollow Horn told the US government, "Some day the Earth will weep. She will beg for her life. She will cry with tears of blood. You will make a choice. If you help her, or if you let her die. And when she dies, you too will die."

(49:49):

100 years earlier, my Wabanaki ancestors, Peskotomuhkati Nation delegates [inaudible 00:49:55] and Joseph Stanislaus stood before the main legislature, asking that the state stop the destruction of rivers and forests. Today, indigenous peoples across the Americas are literally placing their bodies in harm's way to stop the destruction of Mother Earth. I often wonder when the rest of the world will finally hear us.

(50:23):

When will the mainstream population finally realize that the annihilation of indigenous peoples is also the annihilation of mankind on Mother Earth? For how can mankind continue to live when the keepers of the umbilical connection to Mother Earth have been destroyed? Who will nurture that connection when we are gone?

(50:48):

The indigenous way of life is a pathway that can lead humankind back toward life. It provides a way of being that is in harmony and balance with the rest of creation. It reconnects humankind to the sources of its survival, and the heart of its humanity. This way of life is a gift that was given to us by our ancestors, and it can be a gift that we collectively offer to our future, if we have the courage to walk it together. If we listen closely, we can hear the voices of our ancestors encouraging us to follow this path.

(51:37):

As writer Linda Hogan imagines. "Be still, they say. Watch and listen. You are the result of the love of thousands." Among those thousands of ancestors are the ash tree who generously offered her life force to transport us into this world. The soil of Mother Earth who lovingly held the first human being as they were being formed,. And the humble muskrat who selflessly sacrificed his life so that we would have the privilege of living upon this land.

(52:20):

Once we restore these relatives to their rightful place within our kinship networks, the entire lineage of life will rise up to meet us, and we will begin moving back into balance with the flow

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of the universe, and solidly in the direction of renewing Mother Earth. [inaudible 00:52:43]. I offer this for all my relations.

Leah Stokes ([52:52](#)):

That was Sherri Mitchell's essay, "Indigenous Prophecy and Mother Earth," from the anthology *All We Can Save*, read by Alfre Woodard.

Katharine Wilkinson ([53:00](#)):

Sherri Mitchell Weh'na Ha'mu Kwasset is a Native American attorney, teacher, activist, and changemaker. She is a wordsmith and a weaver of worlds, whose name means she who brings the light. Sherri leads the Land Peace Foundation, a nonprofit whose programs include Wicuhkemultine, a kinship community that's taking root on 200 acres of reclaimed land within traditional Penobscot territory.

Leah Stokes ([53:23](#)):

And Alfre Woodard is a celebrated award-winning screen and stage performer, as well as a political activist and producer. In 2020, the *New York Times* listed her as one of the 25 greatest actors of the 21st century. And I couldn't agree more.

Katharine Wilkinson ([53:37](#)):

Same here. And the whole *All We Can Save* audiobook is extraordinary, so check that out anywhere you listen to audiobooks.

Leah Stokes ([53:44](#)):

And before we close, just a quick reminder. If A Matter of Degrees has inspired you to change your relationship with the planet, please tell us what you did differently in 2022, what you want to do in 2023. You can do our survey, which is in the show notes or on [degreespod.com](#), and we'd love to hear from you.

Katharine Wilkinson ([54:02](#)):

Thank you for tuning in for this special episode of A Matter of Degrees, and happy New Year.

Leah Stokes ([54:06](#)):

Happy New Year.

([54:11](#)):

A Matter of Degrees is co-hosted by me, Dr. Leah Stokes.

Katharine Wilkinson ([54:15](#)):

And me, Dr. Katharine Wilkinson.

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Leah Stokes ([54:16](#)):

We are a production made in partnership with Frequency Media, the 2035 Initiative at UC Santa Barbara, and The All We Can Save Project.

Katharine Wilkinson ([54:24](#)):

Thanks to our funders and supporters who make this show possible. Energy Foundation, NorthLight Foundation, McKnight Foundation, Bloomberg Philanthropies, and the 11th Hour project.

Leah Stokes ([54:34](#)):

If you're digging the show, please hop on Apple Podcasts or Spotify and give us a five-star rating or leave us a review.

Katharine Wilkinson ([54:41](#)):

Jordan Rizzieri is our producer. Catherine Devine and Emily Krumberger are our associate producers. Enna Garkusha is our supervising producer, and Michelle Khouri is our executive producer.

Leah Stokes ([54:51](#)):

Matthew Ernest Filler is our lead audio engineer, mixer, and sound designer, with dialogue editing and additional mixing by Claire Bidigare-Curtis.

Katharine Wilkinson ([54:59](#)):

Rose Wong designed our new show art, and Sean Marquand composed our theme song. Additional music came from Blue Dot Sessions.

Leah Stokes ([55:06](#)):

Research, fact checking, communication and production support by Daniela Schulman, Amarachi Metu, and Madeleine Jubilee Saito.

Katharine Wilkinson ([55:13](#)):

Come back soon as we tell more stories for the climate.

Leah Stokes ([55:23](#)):

Sorry. A Matter of Degrees is co-hosted by my cough.